

Section 11: Relationship Mapping

Objectives

- Apply the rule of relationship mapping to correctly transform 1:M and barred relationships
- Apply the rule of relationship mapping to correctly transform M:M relationships
- Transform 1:1 relationships
- Apply the rule of relationship mapping to correctly transform relationships in an arc

Vocabulary

Directions: Identify the vocabulary word for each definition below.

1. _____ A relationship in a database where the foreign key column in the database table cannot be updated
2. _____ A series of relationships implying that the unique identifier of each entity in the chain is carried down to the entity on the next level
3. _____ The product of the resolution of a many to many relationship.

Try It / Solve It

Relationship Mapping

The following entities were mapped to tables in the previous lesson: SHIFT, REGULAR MENU, PROMOTIONAL MENU, FREQUENT DINER CARD.

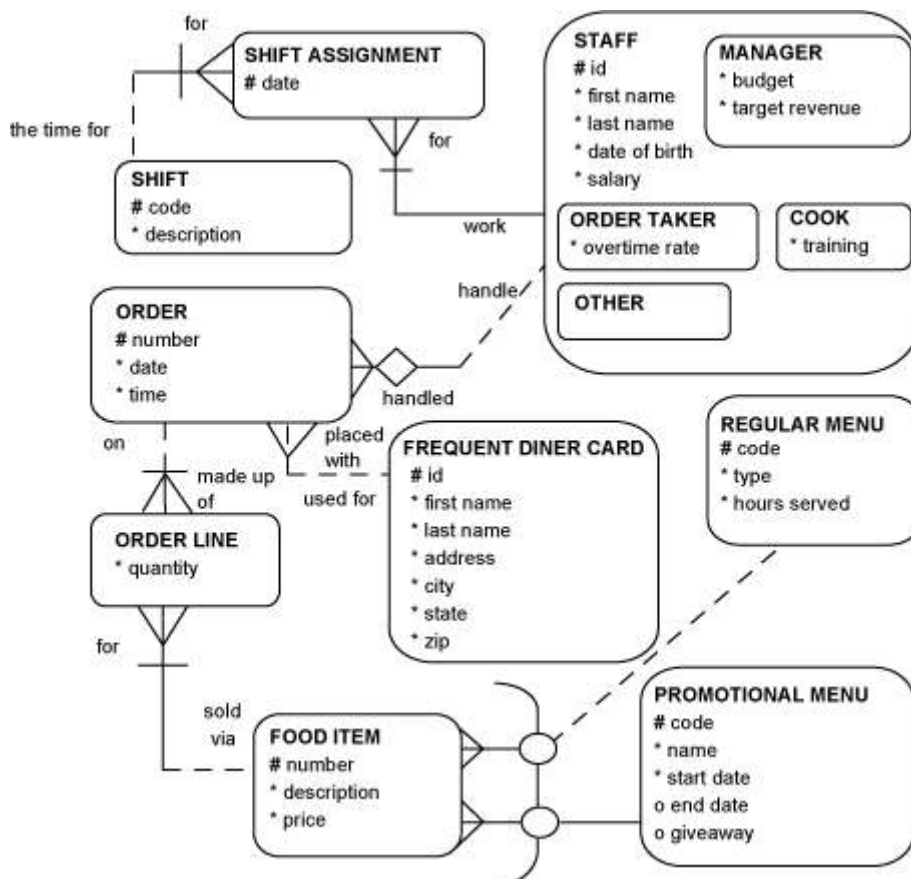
Refer to the completed Global Fast Foods model and map the following entities:

FOOD ITEM
ORDER
ORDER LINE

1. Transform relationships into foreign-key columns.

Use as many rows as necessary in the following table diagram.

Key Type (pk, uk, fk)	Optionality (“*” or “o”)	Column Name



2. Indicate if a check constraint or additional programming is needed to enforce the relationship in the database. Under each table diagram, write the conditions that the check constraint or program has to ensure.

For example:

“To enforce exclusive relationships, a check constraint is needed to make sure that (column A is not null and column B is null) OR (column A is null and column B is not null).”

“To enforce a nontransferable relationship, additional programming is needed to make sure that the <foreign key column> cannot be updated.”